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Search statement 2

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1 / 1 PLUSPAT - ©QUESTEL-ORBIT
PN - US5171671 A 19921215 [US5171671]
TI - (A) Retinoic acid receptor composition
PA - (A) SALK INST FOR BIOLOGICAL STUDI (US)
PAO - The Salk Institute for Biological Studies, San Diego CA [US]
IN - (A) EVANS RONALD M (US); ONG ESTELITA S (US); SEGUI PRUDIMAR S (US); THOMPSON CATHERINE C (US); UEMSONO KAZUHIKO (US); GIGUERE VINCENT (CA)
AP - US54625690 19900806 [1990US-0546256]
FD - Divsn of US276536 19881130 [1988US-0276536]
C.I.P. of US128331 19871202 [1987US-0128331] (Abandoned)
Division of: US4981784
PR - US12833187 19871202 [1987US-0128331]
US27653688 19881130 [1988US-0276536]
US54625690 19900806 [1990US-0546256]
IC - (A) C07K-013/00 C12N-015/12 C12N-015/62 C12N-015/63
EC - C07K-014/705G
C12N-015/62
C12Q-001/68P
ICO - M07K-203/00
M07K-207/00
M07K-211/00
PCL - ORIGINAL (O) : 435069100; CROSS-REFERENCE (X) : 435069700
435252300 435320100 530350000
DT - Corresponding document
CT - Nature 332:850-853, Apr. 28, 1988, Brard et al., Identification of a second human retinoic acid receptor.

Science 240:889-895, May 13, 1988, Evans, The Steroid and Thyroid Hormone Receptor Superfamily.

Nature 330:624-629, Dec. 17, 1987, Giguere et al., Identification of a receptor for the morphogen retinoic acid.

Nature 330:444-450, Dec. 17, 1987, Petkovich et al., A human retinoic acid receptor which belongs to the family of nuclear receptors.

Nature 330:420-421, Dec. 3, 1987, Robertson, Towards a biochemistry of morphogenesis.

Pharm. Rev. 36:935-1005, 1984, Chytil, Retinoic Acid: Biochemistry, Pharmacology, Toxicology, and Therapeutic Use.

PNAS, 84:5645-5649, Aug. 1987, Shubeita et al., Molecular cloning and analysis of functional cDNA and genomic clones encoding bovine cellular retinoic acid

STG - (A) United States patent
AB - A novel retinoic acid receptor is disclosed. The novel receptor is encoded for by cDNA carried on plasmid pHRAR1, which has been deposited with the American Type Culture Collection for patent purposes. Chimeric receptor proteins are also disclosed. The chimera are constructed by exchanging functional domains between the glucocorticoid, the mineralocorticoid, the estrogen-related, the thyroid and the retinoic acid receptors. In addition, a novel method for identifying functional ligands for receptor proteins is

disclosed. The method, which takes advantage of the modular structure of the hormone receptors and the idea that the functional domains may be interchangeable, replaces the DNA-binding domain of a putative novel receptor with the DNA-binding domain of a known receptor such as the glucocorticoid receptor. The resulting chimeric construction, when expressed in cells, produces a hybrid receptor whose activation of a ligand-(e.g., glucocorticoid) inducible promoter is dependent on the presence of the new ligand. The novel method is illustrated in part by showing that the ligand for the new receptor protein is the retinoid, retinoic acid.

b345;s pn=us 5171671;t1/39/1

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\$0.00 Estimated cost File415

\$0.46 TELNET

\$0.46 Estimated cost this search

\$0.46 Estimated total session cost 0.142 DialUnits

File 345:Inpadoc/Fam.& Legal Stat 1968-2003/UD=200324

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| S1 | 1 | PN=US 5171671 |

1/39/1

DIALOG(R)File 345:Inpadoc/Fam.& Legal Stat

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8788796

Basic Patent (No,Kind,Date): WO 8905355 A1 19890615 <No. of Patents: 031>

Patent Family:

| Patent No | Kind | Date | Applic No | Kind | Date |
|-------------|------|----------|-------------|------|------------------|
| AT 124721 | E | 19950715 | EP 88311477 | A | 19881202 |
| AT 182685 | E | 19990815 | EP 92121951 | A | 19881202 |
| AU 8928188 | A1 | 19890705 | AU 8928188 | A | 19881201 |
| AU 9230268 | A1 | 19930422 | AU 9230268 | A | 19921217 |
| AU 628312 | B2 | 19920917 | AU 8928188 | A | 19881201 |
| AU 665039 | B2 | 19951214 | AU 9230268 | A | 19921217 |
| DE 3854120 | C0 | 19950810 | DE 3854120 | A | 19881202 |
| DE 3856354 | C0 | 19990902 | DE 3856354 | A | 19881202 |
| DE 3854120 | T2 | 19960111 | DE 3854120 | A | 19881202 |
| DE 3856354 | T2 | 19991216 | DE 3856354 | A | 19881202 |
| DK 9001368 | A | 19900601 | DK 901368 | A | 19900601 |
| DK 9001368 | A0 | 19900601 | DK 901368 | A | 19900601 |
| EP 540065 | A1 | 19930505 | EP 92121951 | A | 19881202 |
| EP 325849 | A2 | 19890802 | EP 88311477 | A | 19881202 |
| EP 325849 | A3 | 19911016 | EP 88311477 | A | 19881202 |
| EP 325849 | B1 | 19950705 | EP 88311477 | A | 19881202 |
| EP 540065 | B1 | 19990728 | EP 92121951 | A | 19881202 |
| ES 2073408 | T3 | 19950816 | ES 88311477 | EP | 19881202 |
| IE 9668590 | B | 19960626 | IE 883621 | A | 19881202 |
| JP 10279599 | A2 | 19981020 | JP 97299300 | A | 19970925 |
| JP 10295385 | A2 | 19981110 | JP 97299299 | A | 19970925 |
| JP 3006716 | B2 | 20000207 | JP 88500616 | A | 19881201 |
| JP 3503597 | T2 | 19910815 | JP 89500616 | A | 19881201 |
| KR 9709951 | B1 | 19970619 | KR 8971441 | A | 19890801 |
| US 4981784 | A | 19910101 | US 276536 | A | 19881130 |
| US 5171671 | A | 19921215 | US 546256 | A | 19900806 |
| US 5274077 | A | 19931228 | US 975777 | A | 19921113 |
| US 5548063 | A | 19960820 | US 179912 | A | 19940111 |
| US 5571692 | A | 19961105 | US 168686 | A | 19931216 |
| US 5599904 | A | 19970204 | US 845857 | A | 19920303 |
| WO 8905355 | A1 | 19890615 | WO 88US4284 | A | 19881201 (BASIC) |

Priority Data (No,Kind,Date):

US 128331 A 19871202
 US 276536 A 19881130
 WO 88US4284 A 19881201
 EP 88311477 A3 19881202
 WO 88US4284 W 19881201
 US 128331 B2 19871202

US 276536 A3 19881130
 US 546256 A3 19900806
 US 179912 A 19940111
 US 845857 A1 19920303
 US 546570 B3 19900806
 US 168686 A 19931216
 US 845857 A 19920303

PATENT FAMILY:

AUSTRIA (AT)

Patent (No,Kind,Date): AT 124721 E 19950715
 RETINOESAEURE-REZEPTOR-KOMPOSITION UND VERFAHREN ZUR LIGAND-IDENTIFIZIE
 RUNG. (German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): EP 88311477 A 19881202
 Addnl Info: 00325849 19950705
 IPC: * C12N-015/12; C12P-021/02; C12N-015/62; C12N-005/10; C12Q-001/68
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: German
 Patent (No,Kind,Date): AT 182685 E 19990815
 VERFAHREN ZUR IDENTIFIZIERUNG VON LIGANDEN FUER RETINSAEUREREZEPTOREN
 (German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): EP 92121951 A 19881202
 Addnl Info: 540065 19990728
 IPC: * G01N-033/68; G01N-033/74; C12N-015/12; C07K-014/705
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: German

AUSTRIA (AT)

Legal Status (No,Type,Date,Code,Text):

| | | | | |
|-----------|---|----------|--------|--|
| AT 124721 | R | 19950715 | AT REF | CORRESPONDS TO EP-PATENT (ENTSPRICHT EP-PATENT) EP 325849 P 19950705 |
| AT 124721 | R | 19960115 | AT UEP | PUBLICATION OF TRANSLATION OF EUROPEAN PATENT SPECIFICATION (UEBERSETZUNG DER EUROPAEISCHEN PATENTSCHRIFT AUSGEGEBEN) |
| AT 124721 | R | 20000915 | AT REN | CEASED DUE TO NON-PAYMENT OF THE ANNUAL FEE (ERLOSCHEN INFOLGE NICHTZ. D. JAHRESGEB.) |
| AT 182685 | R | 19990815 | AT REF | CORRESPONDS TO EP-PATENT (ENTSPRICHT EP-PATENT) EP 540065 P 19990728 |
| AT 182685 | R | 20000115 | AT RER | CEASED AS TO PARAGRAPH 5 LIT. 3 LAW INTRODUCING PATENT TREATIES (ERLOSCHEN GEM. PAR. 5 ABS. 3 PATVEG.) |

AUSTRALIA (AU)

Patent (No,Kind,Date): AU 8928188 A1 19890705

RETINOIC ACID RECEPTOR COMPOSITION AND METHOD (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI

Author (Inventor): EVANS RONALD MARK; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
CATHERINE CAROLINE

Priority (No,Kind,Date): WO 88US4284 A 19881201; US 128331 A
19871202; US 276536 A 19881130

Applic (No,Kind,Date): AU 8928188 A 19881201

IPC: * C12P-021/02; C12P-019/34; C12P-015/00; C07H-015/12; C12Q-001/68
; C12N-005/00; C12N-001/00; C07K-013/00

Language of Document: English

Patent (No,Kind,Date): AU 9230268 A1 19930422

CHIMERIC RECEPTORS AND METHODS FOR IDENTIFICATION (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI

Author (Inventor): EVANS RONALD MARK; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
CATHERINE CAROLINE

Priority (No,Kind,Date): US 128331 A 19871202

Applic (No,Kind,Date): AU 9230268 A 19921217

IPC: * C12N-015/12; C07K-013/00

CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701

Language of Document: English

Patent (No,Kind,Date): AU 628312 B2 19920917

RETINOIC ACID RECEPTOR COMPOSITION AND METHOD (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI

Author (Inventor): EVANS RONALD MARK; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
CATHERINE CAROLINE

Priority (No,Kind,Date): WO 88US4284 A 19881201; US 128331 A
19871202; US 276536 A 19881130

Applic (No,Kind,Date): AU 8928188 A 19881201

IPC: * C12P-021/02; C12P-019/34; C12P-015/00; C12Q-001/68; C12N-005/00
; C12N-001/00; C07K-013/00; C12N-015/12; C12N-005/10; G01N-033/68;
C07K-015/12

CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701

Language of Document: English

Patent (No,Kind,Date): AU 665039 B2 19951214

CHIMERIC RECEPTORS AND METHODS FOR IDENTIFICATION (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI

Author (Inventor): EVANS RONALD MARK; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
CATHERINE CAROLINE

Priority (No,Kind,Date): US 128331 A 19871202

Applic (No,Kind,Date): AU 9230268 A 19921217

IPC: * C12N-015/12; C07K-013/00

CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701

Language of Document: English

GERMANY (DE)

Patent (No,Kind,Date): DE 3854120 C0 19950810

RETINOESAEURE-REZEPTOR-KOMPOSITION UND VERFAHREN ZUR
LIGAND-IDENTIFIZIERUNG. (German)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)

Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)

Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
19881130

Applic (No,Kind,Date): DE 3854120 A 19881202

IPC: * C12N-015/12; C12P-021/02; C12N-015/62; C12N-005/10; C12Q-001/68
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: German
 Patent (No,Kind,Date): DE 3856354 C0 19990902
 VERFAHREN ZUR IDENTIFIZIERUNG VON LIGANDEN FUER RETINSAEUREREZEPTOREN
 (German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): DE 3856354 A 19881202
 IPC: * G01N-033/68; G01N-033/74; C12N-015/12; C07K-014/705
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: German
 Patent (No,Kind,Date): DE 3854120 T2 19960111
 RETINOESAEURE-REZEPTOR-KOMPOSITION UND VERFAHREN ZUR
 LIGAND-IDENTIFIZIERUNG. (German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): DE 3854120 A 19881202
 IPC: * C12Q-001/68; C12N-005/10; C12N-015/62; C12P-021/02; C12N-015/12
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: German
 Patent (No,Kind,Date): DE 3856354 T2 19991216
 VERFAHREN ZUR IDENTIFIZIERUNG VON LIGANDEN FUER RETINSAEUREREZEPTOREN
 (German)
 Patent Assignee: SALK INST FOR BIOLOG STUDIES L (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): DE 3856354 A 19881202
 IPC: * G01N-033/68; G01N-033/74; C12N-015/12; C07K-014/705
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: German

GERMANY (DE)

Legal Status (No,Type,Date,Code,Text):

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|------------|---|----------|-------------|--|
| DE 3854120 | P | 19950810 | DE REF | CORRESPONDS TO (ENTSPRICHT) |
| | | | EP 325849 P | 19950810 |
| DE 3854120 | P | 19960111 | DE 8373 | TRANSLATION OF PATENT DOCUMENT OF EUROPEAN PATENT WAS RECEIVED AND HAS BEEN PUBLISHED (UEBERSETZUNG DER PATENTSCHRIFT DES EUROPAEISCHEN PATENTES IST EINGEGANGEN UND VEROEFFENTLICHT WORDEN) |
| DE 3854120 | P | 19960808 | DE 8364 | NO OPPOSITION DURING TERM OF OPPOSITION (EINSPRUCHSFRIST ABGELAUFEN OHNE DASS EINSPRUCH ERHOBEN WURDE) |
| DE 3854120 | P | 20021107 | DE 8339 | CEASED/NON-PAYMENT OF THE ANNUAL FEE (WEGEN NICHTZ. D. JAHRESGEB.) |

ERLOSCHEN)
 DE 3856354 P 19990902 DE REF CORRESPONDS TO (ENTSPRICHT)
 EP 540065 P 19990902
 DE 3856354 P 19991216 DE 8373 TRANSLATION OF PATENT
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 HAS BEEN PUBLISHED (UEBERSETZUNG DER
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 EINGEGANGEN UND VEROEFFENTLICHT WORDEN)
 DE 3856354 P 20021107 DE 8339 CEASED/NON-PAYMENT OF THE
 ANNUAL FEE (WEGEN NICHTZ. D. JAHRESGEB.
 ERLOSCHEN)

DENMARK (DK)

Patent (No,Kind,Date): DK 9001368 A 19900601
 RETINSYRERECEPTORMIDDEL OG FREMGANGSMAADE (Danish)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK; THOMPSON CATHERINE CAROLINE;
 GIGUERE VINCENT; ONG ESTELITA SEBASTIAN; SEGUI PRUDIMAR SERRANO;
 UMESONO KAZUHIKO
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130; WO 88US4284 A 19881201
 Applic (No,Kind,Date): DK 901368 A 19900601
 IPC: * C12N-015/12; C07K-013/00; C12N-015/85
 Derwent WPI Acc No: * C 89-192701
 Language of Document: Danish
 Patent (No,Kind,Date): DK 9001368 A0 19900601
 RETINSYRERECEPTORMIDDEL OG FREMGANGSMAADE (Danish)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK; THOMPSON CATHERINE CAROLINE;
 GIGUERE VINCENT; ONG ESTELITA SEBASTIAN; SEGUI PRUDIMAR SERRANO;
 UMESONO KAZUHIKO
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130; WO 88US4284 A 19881201
 Applic (No,Kind,Date): DK 901368 A 19900601
 IPC: * C12N-015/12; C07K-013/00; C12N-015/85
 Derwent WPI Acc No: * C 89-192701
 Language of Document: Danish

DENMARK (DK)

Legal Status (No,Type,Date,Code,Text):
 DK 901368 A 19871202 DK AAA PRIORITY OF THE APPLICATION
 (PATENT APPLICATION) (PRIORITY OF THE APPL.
 (PATENT APPL.))
 US 128331 A 19871202
 DK 901368 A 19881130 DK AAA PRIORITY OF THE APPLICATION
 (PATENT APPLICATION) (PRIORITY OF THE APPL.
 (PATENT APPL.))
 US 276536 A 19881130
 DK 901368 A 19881201 DK AAA PRIORITY OF THE APPLICATION
 (PATENT APPLICATION) (PRIORITY OF THE APPL.
 (PATENT APPL.))
 WO 88US4284 A 19881201
 DK 901368 A 19900601 DK A PUBLISHED APPLICATION
 DK 901368 A 19900601 DK AEA DATA OF DOMESTIC APPLICATION
 (DATA OF DOMESTIC APPL.)
 DK 901368 A 19900601
 DK 901368 A 20000731 DK AHB APPLICATION SHELVED DUE TO
 NON-PAYMENT (ANSOEGNING HENLAGT P.G.A.
 MANGLENDE BETALING)

EUROPEAN PATENT OFFICE (EP)

Patent (No,Kind,Date): EP 540065 A1 19930505

RETINOIC ACID RECEPTOR COMPOSITION (English; French; German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): EP 92121951 A 19881202
 Designated States: (National) AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
 LU; NL; SE
 IPC: * C12N-015/12; C12N-015/62; G01N-033/68; G01N-033/74; C12N-005/10
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English
 Patent (No,Kind,Date): EP 325849 A2 19890802
 RETINOIC ACID RECEPTOR COMPOSITION AND METHOD FOR IDENTIFYING LIGANDS
 (English; French; German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): EP 88311477 A 19881202
 Designated States: (National) AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
 LU; NL; SE
 IPC: * C12N-015/00; C07H-021/04; C12P-021/02; C12N-005/00
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English
 Patent (No,Kind,Date): EP 325849 A3 19911016
 RETINOIC ACID RECEPTOR COMPOSITION AND METHOD FOR IDENTIFYING LIGANDS
 (English; French; German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK; GIGUERE VINCENT; ONG ESTELITA
 SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
 CATHERINE CAROLINE
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): EP 88311477 A 19881202
 Designated States: (National) AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
 LU; NL; SE
 IPC: * C12N-015/00; C07H-021/04; C12P-021/02; C12N-005/00
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English
 Patent (No,Kind,Date): EP 325849 B1 19950705
 RETINOIC ACID RECEPTOR COMPOSITION AND METHOD FOR IDENTIFYING LIGANDS.
 (English; French; German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): EP 88311477 A 19881202
 Designated States: (National) AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
 LU; NL; SE
 IPC: * C12N-015/12; C12P-021/02; C12N-015/62; C12N-005/10; C12Q-001/68
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English

Patent (No,Kind,Date): EP 540065 B1 19990728
 METHOD FOR IDENTIFYING LIGANDS FOR RETINOIC ACID RECEPTORS (English;
 French; German)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): EP 88311477 A3 19881202; US 128331 A
 19871202; US 276536 A 19881130
 Applic (No,Kind,Date): EP 92121951 A 19881202
 Designated States: (National) AT; BE; CH; DE; ES; FR; GB; GR; IT; LI;
 LU; NL; SE
 IPC: * G01N-033/68; G01N-033/74; C12N-015/12; C07K-014/705
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English

EUROPEAN PATENT OFFICE (EP)

Legal Status (No,Type,Date,Code,Text):

| | | | |
|-----------|---|--|--|
| EP 325849 | P | 19871202 EP AA | PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG)) |
| | | US 128331 A 19871202 | |
| EP 325849 | P | 19881130 EP AA | PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG)) |
| | | US 276536 A 19881130 | |
| EP 325849 | P | 19881202 EP AE | EP-APPLICATION (EUROPAEISCHE ANMELDUNG) |
| | | EP 88311477 A 19881202 | |
| EP 325849 | P | 19890802 EP AK | DESIGNATED CONTRACTING STATES IN AN APPLICATION WITHOUT SEARCH REPORT (IN EINER ANMELDUNG OHNE RECHERCHENBERICHT BENANNTE VERTRAGSSTAATEN) |
| | | AT BE CH DE ES FR GB GR IT LI LU NL SE | |
| EP 325849 | P | 19890802 EP A2 | PUBLICATION OF APPLICATION WITHOUT SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG OHNE RECHERCHENBERICHT) |
| EP 325849 | P | 19911016 EP AK | DESIGNATED CONTRACTING STATES IN A SEARCH REPORT (IN EINEM RECHERCHENBERICHT BENANNTE VERTRAGSSTAATEN) |
| | | AT BE CH DE ES FR GB GR IT LI LU NL SE | |
| EP 325849 | P | 19911016 EP A3 | SEPARATE PUBLICATION OF THE SEARCH REPORT (ART. 93) (GESONDERTE VEROEFFENTLICHUNG DES RECHERCHENBERICHTS (ART. 93)) |
| EP 325849 | P | 19920527 EP 17P | REQUEST FOR EXAMINATION FILED (PRUEFUNGSANTRAG GESTELLT) 920326 |
| EP 325849 | P | 19920819 EP 17Q | FIRST EXAMINATION REPORT (ERSTER PRUEFUNGSBESCHIED) 920706 |
| EP 325849 | P | 19930505 EP AH | DIVISIONAL APPLICATION (ART. 76) IN: (TEILANMELDUNG (ART. 76) IN:) |
| | | EP 540065 P | |
| EP 325849 | P | 19930526 EP RIN1 | INVENTOR (CORRECTION) (ERFINDER (KORR.)) |
| | | EVANS, RONALD MARK, ; GIGUERE, VINCENT, ; | |
| | | ONG, ESTELITA SEBASTIAN, ; SEGUI, PRUDIMAR | |
| | | SERRANO ; UMESONO, KAZUHIKO, ; THOMPSON, | |

EP 325849 P 19930609 EP RIN1 INVENTOR (CORRECTION)
(ERFINDER (KORR.))
EVANS, RONALD MARK, ; GIGUERE, VINCENT, ;
ONG, ESTELITA SEBASTIAN, ; SEGUI, PRUDIMAR
SERRANO ; UMESONO, KAZUHIKO, ; THOMPSON,
CATHERINE CAROLINE

EP 325849 P 19950705 EP AK DESIGNATED CONTRACTING
STATES MENTIONED IN A PATENT SPECIFICATION
(IN EINER PATENTSCHRIFT ANGEFUEHRTE BENANNT
VERTRAGSSTAATEN)
AT BE CH DE ES FR GB GR IT LI LU NL SE

EP 325849 P 19950705 EP B1 PATENT SPECIFICATION
(PATENTSCHRIFT)

EP 325849 P 19950705 EP REF IN AUSTRIA REGISTERED AS:
(IN AT EINGETRAGEN ALS:)
AT 124721 R 19950715

EP 325849 P 19950705 EP XX MISCELLANEOUS: (DIVERSES:)

TEILANMELDUNG 92121951.5 EINGEREICHT AM
02/12/88.

EP 325849 P 19950713 EP ET FR: TRANSLATION FILED (FR:
TRADUCTION A ETE REMISE)

EP 325849 P 19950717 EP ITF IT: TRANSLATION FOR AN EP
PATENT FILED (IT: DEPOSITO TRADUZIONE DI
BREVETTO EUROPEO)
DR. ING. A. RACHELI & C.

EP 325849 P 19950810 EP REF CORRESPONDS TO:
(ENTSPRICHT)
DE 3854120 P 19950810

EP 325849 P 19950816 ES FG2A/REG DEFINITIVE PROTECTION
(PROTECCION DEFINITIVA)
2073408T3

EP 325849 P 19960703 EP 26N NO OPPOSITION FILED (KEIN
EINSRUCH EINGELEGT)

EP 325849 P 19990728 EP AH DIVISIONAL APPLICATION (ART.
76) IN: (TEILANMELDUNG (ART. 76) IN:)
EP 540065 P

EP 325849 P 20000630 EP BERE BE: LAPSED (BE: DECHU)
19991231 THE ;SALK INSTITUTE FOR BIOLOGICAL
STUDIES

EP 325849 P 20000814 EP EUG SE: EUROPEAN PATENT HAS
LAPSED (SE: EUROPEISKT PATENT HAR UPPHOERT
ATT GAELLA)
88311477.9

EP 325849 P 20000901 EP NLV4 NL: LAPSED OR ANULLED DUE TO
NON-PAYMENT OF THE ANNUAL FEE (NL: VERVALLEN
WEGENS NIET BETALEN VAN EEN JAARCIJNS)
20000701

EP 325849 P 20020101 GB IF02/REG EUROPEAN PATENT IN FORCE AS
OF 2002-01-01

EP 325849 P 20020724 EP GBPC GB: EUROPEAN PATENT CEASED
THROUGH NON-PAYMENT OF RENEWAL FEE
20011202

EP 325849 P 20020815 CH PL/REG PATENT CEASED
(LOESCHUNG/RADIATION/RADIAZION)

EP 325849 P 20020927 FR ST/REG LAPSED (CONSTATATION DE
DECHEANCES)

EP 540065 P 19871202 EP AA PRIORITY (PATENT
APPLICATION) (PRIORITAET (PATENTANMELDUNG))

US 128331 A 19871202

Searched by M. Smith

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|-----------|---|--|---|
| EP 540065 | P | 19881130 EP AA | PRIORITY (PATENT APPLICATION) (PRIORITAET (PATENTANMELDUNG)) |
| | | US 276536 A | 19881130 |
| EP 540065 | P | 19881202 EP AA | DIVIDED OUT OF (AUSSCHIEDUNG AUS) |
| | | EP 88311477 A3 | 19881202 |
| EP 540065 | P | 19881202 EP AE | EP-APPLICATION (EUROPAEISCHE ANMELDUNG) |
| | | EP 92121951 A | 19881202 |
| EP 540065 | P | 19930505 EP AC | DIVISIONAL APPLICATION (ART. 76) OF: (TEILANMELDUNG (ART. 76) AUS:) |
| | | EP 325849 P | |
| EP 540065 | P | 19930505 EP AK | DESIGNATED CONTRACTING STATES IN AN APPLICATION WITH SEARCH REPORT (IN EINER ANMELDUNG BENANNT VERTRAGSSTAATEN) |
| | | AT BE CH DE ES FR GB GR IT LI LU NL SE | |
| EP 540065 | P | 19930505 EP A1 | PUBLICATION OF APPLICATION WITH SEARCH REPORT (VEROEFFENTLICHUNG DER ANMELDUNG MIT RECHERCHENBERICHT) |
| EP 540065 | P | 19930526 EP RIN1 | INVENTOR (CORRECTION) (ERFINDER (KORR.)) |
| | | EVANS, RONALD MARK ; GIGUERE, VINCENT ; ONG, ESTELITA SEBASTIAN ; SEGUI, PRUDIMAR SERRANO ; UMESONO, KAZUHIKO ; UMESONO, KAZUHIKO | |
| EP 540065 | P | 19930623 EP RIN1 | INVENTOR (CORRECTION) (ERFINDER (KORR.)) |
| | | EVANS, RONALD MARK ; GIGUERE, VINCENT ; ONG, ESTELITA SEBASTIAN ; SEGUI, PRUDIMAR SERRANO ; UMESONO, KAZUHIKO ; UMESONO, KAZUHIKO | |
| EP 540065 | P | 19930707 EP RIN1 | INVENTOR (CORRECTION) (ERFINDER (KORR.)) |
| | | EVANS, RONALD MARK ; GIGUERE, VINCENT ; ONG, ESTELITA SEBASTIAN ; SEGUI, PRUDIMAR SERRANO ; UMESONO, KAZUHIKO ; UMESONO, KAZUHIKO | |
| EP 540065 | P | 19930721 EP RIN1 | INVENTOR (CORRECTION) (ERFINDER (KORR.)) |
| | | EVANS, RONALD MARK ; GIGUERE, VINCENT ; ONG, ESTELITA SEBASTIAN ; SEGUI, PRUDIMAR SERRANO ; UMESONO, KAZUHIKO ; THOMPSON, CATHERINE CAROLINE | |
| EP 540065 | P | 19930818 EP 17P | REQUEST FOR EXAMINATION FILED (PRUEFUNGSANTRAG GESTELLT) |
| | | 930621 | |
| EP 540065 | P | 19960320 EP 17Q | FIRST EXAMINATION REPORT (ERSTER PRUEFUNGSBESCHIED) |
| | | 960205 | |
| EP 540065 | P | 19990728 EP AC | DIVISIONAL APPLICATION (ART. 76) OF: (TEILANMELDUNG (ART. 76) AUS:) |
| | | EP 325849 P | |
| EP 540065 | P | 19990728 EP AK | DESIGNATED CONTRACTING STATES MENTIONED IN A PATENT SPECIFICATION: (IN EINER PATENTSCHRIFT ANGEFUEHRTE BENANNT VERTRAGSSTAATEN) |
| | | AT BE CH DE ES FR GB GR IT LI LU NL SE | |
| EP 540065 | P | 19990728 EP B1 | PATENT SPECIFICATION (PATENTSCHRIFT) |
| EP 540065 | P | 19990728 EP REF | IN AUSTRIA REGISTERED AS: (IN AT EINGETRAGEN ALS:) |
| | | AT 182685 R | 19990815 |
| EP 540065 | P | 19990730 CH EP/REG | ENTRY IN THE NATIONAL PHASE |

| | | | |
|-----------|---|--|--|
| EP 540065 | P | 19990902 EP REF (ENTSPRICHT) DE 3856354 P 19990902 | (EINTRITT IN DIE NATIONALE PHASE) CORRESPONDS TO: |
| EP 540065 | P | 19991001 EP ET | FR: TRANSLATION FILED (FR: TRADUCTION A ETE REMISE) |
| EP 540065 | P | 20000103 EP NLV1 | NL: LAPSED OR ANNULED DUE TO FAILURE TO FULFILL THE REQUIREMENTS OF ART. 29P AND 29M OF THE PATENTS ACT; NO LEGAL EFFECT FROM THE DATE OF (NL: WIRKUNG IN NL NICHT EINGETRETEN (ART. 29P UND 29M NL PATG.)) |
| EP 540065 | P | 20000131 CH PL/REG | PATENT CEASED (LOESCHUNG/RADIATION/RADIAZION) |
| EP 540065 | P | 20000614 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20000614 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20000621 EP 26 | OPPOSITION FILED (EINSPRUCH EINGELEGT) 20000425 SMITHKLINE BEECHAM PLC |
| EP 540065 | P | 20001213 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20001213 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20001213 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20001213 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20001227 EP R25 | LAPSED AS TO RULE 92 1 P (CORRECTION) (ERLOSCHEN GEM. REGEL 92 1 P (KORR.)) AT 19990728 |
| EP 540065 | P | 20001227 EP R25 | LAPSED AS TO RULE 92 1 P (CORRECTION) (ERLOSCHEN GEM. REGEL 92 1 P (KORR.)) AT 19990728 |
| EP 540065 | P | 20001227 EP R25 | LAPSED AS TO RULE 92 1 P (CORRECTION) (ERLOSCHEN GEM. REGEL 92 1 P (KORR.)) AT 19990728 |
| EP 540065 | P | 20001227 EP R25 | LAPSED AS TO RULE 92 1 P (CORRECTION) (ERLOSCHEN GEM. REGEL 92 1 P (KORR.)) AT 19990728 |
| EP 540065 | P | 20010606 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20010606 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20010606 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |
| EP 540065 | P | 20010606 EP 25 | LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) AT 19990728 |

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| EP 540065 | P | 20010606 EP 25 | AT 19990728 LAPSED AS TO RULE 92 1 P (ERLOSCHEN GEM. REGEL 92 1 P) |
| EP 540065 | P | 20020101 GB IF02/REG | AT 19990728 EUROPEAN PATENT IN FORCE AS OF 2002-01-01 |
| EP 540065 | P | 20020605 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020605 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020605 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020605 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020605 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020605 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020619 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20020724 EP GBPC | GB: EUROPEAN PATENT CEASED THROUGH NON-PAYMENT OF RENEWAL FEE 20011202 |
| EP 540065 | P | 20020927 FR ST/REG | LAPSED (CONSTATATION DE DECHEANCES) |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |

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|-----------|---|------------------|---|
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030102 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030205 EP RIC2 | CLASSIFICATION (CORRECTION) (KLASSIFIKATION (KORR.)) 7G 01N 33/68 A, 7G 01N 33/74 B, 7C 12N 15/12 B, 7C 07K 14/705 B |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030212 EP 25 | LAPSED IN A CONTRACTING STATE (ERLOSCHEN IN EINEM VERTRAGSSTAAT) AT 19990728 |
| EP 540065 | P | 20030226 EP RIC2 | CLASSIFICATION (CORRECTION) (KLASSIFIKATION (KORR.)) 7G 01N 33/68 A, 7G 01N 33/74 B, 7C 12N 15/12 B, 7C 07K 14/705 B |

SPAIN (ES)

Patent (No,Kind,Date): ES 2073408 T3 19950816

COMPOSICION DE RECEPTOR DE ACIDO RETINOICO Y METODO PARA IDENTIFICAR LIGANDOS. (Spanish)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI

Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)

Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A 19881130

Applic (No,Kind,Date): ES 88311477 EP 19881202

Addnl Info: 0325849 EP patent valid in AT

IPC: * C12N-015/12; C12P-021/02; C12N-015/62; C12N-005/10; C12Q-001/68
CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701
Language of Document: Spanish

SPAIN (ES)

Legal Status (No,Type,Date,Code,Text):
ES 2073408 P 19950816 ES FG2A DEFINITIVE PROTECTION
(PROTECCION DEFINITIVA)
325849

IRELAND (IE)

Patent (No,Kind,Date): IE 9668590 B 19960626
RETINOIC ACID RECEPTOR COMPOSITION AND METHOD FOR IDENTIFYING LIGANDS
(English)
Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
Author (Inventor): EVANS RONALD MARK; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO
Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
19881130
Applic (No,Kind,Date): IE 883621 A 19881202
IPC: * C12N-015/12; C12N-015/62; C12P-021/02; C12Q-001/68
CA Abstract No: * 114(13)116377E
Derwent WPI Acc No: * C 89-192701
Language of Document: English

IRELAND (IE)

Legal Status (No,Type,Date,Code,Text):
IE 68590 P 20000920 IE MM4A PATENT LAPSED

JAPAN (JP)

Patent (No,Kind,Date): JP 10279599 A2 19981020
CONFIGURATION OF RETINOIN RECEPTOR AND METHOD (English)
Patent Assignee: SALK INST FOR BIOLOGICAL STUDI
Author (Inventor): EVANS RONALD M; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
CATHERINE C
Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
19881130
Applic (No,Kind,Date): JP 97299300 A 19970925
IPC: * C07K-014/705; C07K-014/72; C07K-019/00; C12N-005/10;
C12N-015/09; C12P-021/02; C12R-001-91
CA Abstract No: * 114(13)116377E
Derwent WPI Acc No: * C 89-192701
Language of Document: Japanese
Patent (No,Kind,Date): JP 10295385 A2 19981110
CONSTITUTION OF RETINOIN RECEPTOR, AND METHOD FOR IDENTIFICATION OF
FUNCTIONAL LIGAND TO RECEPTOR (English)
Patent Assignee: SALK INST FOR BIOLOGICAL STUDI
Author (Inventor): EVANS RONALD M; GIGUERE VINCENT; ONG ESTELITA
SEBASTIAN; SEGUI PRUDIMAR SERRANO; UMESONO KAZUHIKO; THOMPSON
CATHERINE C
Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
19881130
Applic (No,Kind,Date): JP 97299299 A 19970925
IPC: * C12N-015/09; C07K-014/705; C07K-014/72; C07K-019/00;
C12P-021/02; G01N-033/15; G01N-033/566; G01N-033/50; C12R-001-91
CA Abstract No: * 114(13)116377E
Derwent WPI Acc No: * C 89-192701
Language of Document: Japanese
Patent (No,Kind,Date): JP 3006716 B2 20000207
Patent Assignee: SALK INST FOR BIOLOGICAL STUDI
Author (Inventor): EUANSU RONARUDO MAAKU; JIGYUURU UINSENTO; ONGU
ESUTERITA SEBASUCHAN; SEGUYI PURUDEIMAA SERAANO; UMESONO KAZUHIKO;

TONPUSON KYASARIN KYARORAIN

Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A 19881130

Applic (No,Kind,Date): JP 88500616 A 19881201

IPC: * C12N-015/09; C07K-014/705; C12N-005/10; C12P-021/02; C12R-001-91

Language of Document: Japanese

Patent (No,Kind,Date): JP 3503597 T2 19910815

Priority (No,Kind,Date): WO 88US4284 W 19881201; US 128331 A 19871202; US 276536 A 19881130

Applic (No,Kind,Date): JP 89500616 A 19881201

IPC: * C12N-015/12; C07K-015/06; C12P-021/02; C12R-001-91

CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701

Language of Document: Japanese

KOREA, REPUBLIC (KR)

Patent (No,Kind,Date): KR 9709951 B1 19970619

RETINOIC ACID RECEPTOR COMPOSITION AND METHOD (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)

Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CN); ONG ESTELITA SEBASTIN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)

Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A 19881130; WO 88US4284 W 19881201

Applic (No,Kind,Date): KR 8971441 A 19890801

IPC: * C12N-015/00; C12P-021/02

CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701

Language of Document: Korean

UNITED STATES OF AMERICA (US)

Patent (No,Kind,Date): US 4981784 A 19910101

RETINOIC ACID RECEPTOR METHOD (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)

Author (Inventor): EVANS RONALD M (US); ONG ESTELITA (US); SEGUI PRUDIMAR S (US); THOMPSON CATHERINE C (US); UMESONO KAZUHIKO (US); GIGUERE VINCENT (CA)

Priority (No,Kind,Date): US 128331 B2 19871202

Applic (No,Kind,Date): US 276536 A 19881130

National Class: * 435006000; 435069100; 435069400; 435069700; 435070100; 435172100; 435172300; 935009000; 935010000; 935013000; 935076000

IPC: * C12Q-001/68; C12P-021/00; C12N-015/00

Derwent WPI Acc No: * C 89-192701

Language of Document: English

Patent (No,Kind,Date): US 5171671 A 19921215

RETINOIC ACID RECEPTOR COMPOSITION (English)

Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)

Author (Inventor): EVANS RONALD M (US); ONG ESTELITA S (US); SEGUI PRUDIMAR S (US); THOMPSON CATHERINE C (US); UEMSONO KAZUHIKO (US); GIGUERE VINCENT (CA)

Priority (No,Kind,Date): US 276536 A3 19881130; US 128331 B2 19871202

Applic (No,Kind,Date): US 546256 A 19900806

Addnl Info: 4981784 Patented

National Class: * 435069100; 435069700; 435257300; 435320100; 530350000; 536027000

IPC: * C12N-015/12; C12N-015/62; C12N-015/63; C07K-013/00

CA Abstract No: * 114(13)116377E

Derwent WPI Acc No: * C 89-192701

Language of Document: English

Patent (No,Kind,Date): US 5274077 A 19931228
 RETINOIC ACID RECEPTOR COMPOSITION (English)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD M (US); ONG ESTELITA S (US); SEGUI
 PRUDIMAR S (US); THOMPSON CATHERINE C (US); UMESONO KAZUHIKO (US);
 GIGUERE VINCENT (CA)
 Priority (No,Kind,Date): US 546256 A3 19900806; US 276536 A3
 19881130; US 128331 B2 19871202
 Applic (No,Kind,Date): US 975777 A 19921113
 Addnl Info: 5171671 19921215 Patented; 4981784 19910101 Patented
 National Class: * 530350000; 530358000; 435069100; 435252300
 IPC: * C07K-013/00; C12N-015/12
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English
 Patent (No,Kind,Date): US 5548063 A 19960820
 RETINOIC ACID RECEPTOR ALPHA PROTEINS Retinoic acid receptor alpha
 proteins (English)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD M (US); ONG ESTELITA S (US); SEGUI
 PRUDIMAR S (US); THOMPSON CATHERINE C (US); UMESONO KAZUHIKO (US);
 GIGUERE VINCENT (CA)
 Priority (No,Kind,Date): US 179912 A 19940111; US 845857 A1
 19920303; US 546570 B3 19900806; US 276536 A3 19881130; US 128331
 B2 19871202
 Applic (No,Kind,Date): US 179912 A 19940111
 Addnl Info: 4981784 Patented
 National Class: * 530350000; 530324000; 435069100
 IPC: * C07K-014/705
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English
 Patent (No,Kind,Date): US 5571692 A 19961105
 RETINOIC ACID RECEPTOR ALPHA , VECTORS AND CELLS COMPRISING THE SAME
 DNA ENCODING Retinoic acid receptor alpha , vectors and cells
 comprising the same DNA encoding (English)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD M (US); ONG ESTELITA S (US); SEGUI
 PRUDIMAR S (US); THOMPSON CATHERINE C (US); UMESONO KAZUHIKO (US);
 GIGUERE VINCENT (CA)
 Priority (No,Kind,Date): US 168686 A 19931216; US 845857 A1
 19920303; US 546570 B3 19900806; US 276536 A3 19881130; US 128331
 B2 19871202
 Applic (No,Kind,Date): US 168686 A 19931216
 Addnl Info: 4981784 Patented
 National Class: * 435069100; 435240200; 435252300; 435254110;
 435320100; 536023500
 IPC: * C12N-015/12; C12N-015/63; C12N-005/10; C12N-001/21
 CA Abstract No: * 114(13)116377E
 Derwent WPI Acc No: * C 89-192701
 Language of Document: English
 Patent (No,Kind,Date): US 5599904 A 19970204
 CHIMERIC STEROID HORMONE SUPERFAMILY RECEPTOR PROTEINS (English)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD M (US); ONG ESTELITA S (US); SEGUI
 PRUDIMAR S (US); THOMPSON CATHERINE C (US); UMESONO KAZUHIKO (US);
 GIGUERE VINCENT (CA)
 Priority (No,Kind,Date): US 845857 A 19920303; US 546570 B3
 19900806; US 276536 A3 19881130; US 128331 B2 19871202
 Applic (No,Kind,Date): US 845857 A 19920303
 Addnl Info: 4981784 Patented
 National Class: * 530350000; 435069100; 435069700; 935036000

IPC: * C07K-019/00; C07K-014/705
CA Abstract No: * 114(13)116377E
Derwent WPI Acc No: * C 89-192701
Language of Document: English

UNITED STATES OF AMERICA (US)

Legal Status (No, Type, Date, Code, Text):

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| US 4981784 | P | 19871202 | US AA | PRIORITY |
| | | US 128331 | B2 | 19871202 |
| US 4981784 | P | 19881130 | US AE | APPLICATION DATA (PATENT) |
| | | (APPL. DATA (PATENT)) | | |
| | | US 276536 | A | 19881130 |
| US 4981784 | P | 19890123 | US AS02 | ASSIGNMENT OF ASSIGNOR'S |
| | | INTEREST | | |
| | | SALK INSTITUTE FOR BIOLOGICAL STUDIES, THE, | | |
| | | SAN DIEGO, CA A CA NOT-FOR-PROFIT CO ; EVANS, | | |
| | | RONALD M. : 19881202; ONG, ESTELITA S. : | | |
| | | 19881202; SEGUI, PRUDIMAR S. : 19881202; | | |
| | | THOMPSON, CATHERINE C : 19881202; | | |
| US 4981784 | P | 19910101 | US A | PATENT |
| US 4981784 | P | 19931228 | US AS02 | ASSIGNMENT OF ASSIGNOR'S |
| | | INTEREST | | |
| | | SALK INSTITUTE FOR BIOLOGICAL STUDIES, THE | | |
| | | 10010 NORTH TORREY PINES ROAD LA JOLL ; | | |
| | | GIGUERE, VINCENT : 19881209 | | |
| US 4981784 | P | 20011218 | US RF | REISSUE APPLICATION FILED |
| | | (REISSUE APPL. FILED) | | |
| | | 20010131 | | |
| US 5171671 | P | 19871202 | US AA | PRIORITY |
| | | US 128331 | B2 | 19871202 |
| US 5171671 | P | 19881130 | US AA | PRIORITY |
| | | US 276536 | A3 | 19881130 |
| US 5171671 | P | 19900806 | US AE | APPLICATION DATA (PATENT) |
| | | (APPL. DATA (PATENT)) | | |
| | | US 546256 | A | 19900806 |
| US 5171671 | P | 19921215 | US A | PATENT |
| US 5171671 | P | 19940531 | US DC | DISCLAIMER FILED |
| | | 931214 | | |
| US 5171671 | P | 19941101 | US CC | CERTIFICATE OF CORRECTION |
| US 5171671 | P | 20010501 | US RF | REISSUE APPLICATION FILED |
| | | (REISSUE APPL. FILED) | | |
| | | 20010131 | | |
| US 5274077 | P | 19871202 | US AA | PRIORITY |
| | | US 128331 | B2 | 19871202 |
| US 5274077 | P | 19881130 | US AA | PRIORITY |
| | | US 276536 | A3 | 19881130 |
| US 5274077 | P | 19900806 | US AA | PRIORITY |
| | | US 546256 | A3 | 19900806 |
| US 5274077 | P | 19921113 | US AE | APPLICATION DATA (PATENT) |
| | | (APPL. DATA (PATENT)) | | |
| | | US 975777 | A | 19921113 |
| US 5274077 | P | 19931228 | US A | PATENT |
| US 5274077 | P | 19940510 | US DC | DISCLAIMER FILED |
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| US 5548063 | P | 19871202 | US AA | PRIORITY |
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| US 5548063 | P | 19881130 | US AA | PRIORITY |
| | | US 276536 | A3 | 19881130 |
| US 5548063 | P | 19900806 | US AA | PRIORITY |
| | | US 546570 | B3 | 19900806 |
| US 5548063 | P | 19920303 | US AA | PRIORITY |
| | | US 845857 | A1 | 19920303 |

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| US 5548063 | P | 19940111 | US AE | APPLICATION DATA (PATENT) |
| | | | (APPL. DATA (PATENT)) | |
| | | US 179912 | A | 19940111 |
| US 5548063 | P | 19960820 | US A | PATENT |
| US 5571692 | P | 19871202 | US AA | PRIORITY |
| | | US 128331 | B2 | 19871202 |
| US 5571692 | P | 19881130 | US AA | PRIORITY |
| | | US 276536 | A3 | 19881130 |
| US 5571692 | P | 19900806 | US AA | PRIORITY |
| | | US 546570 | B3 | 19900806 |
| US 5571692 | P | 19920303 | US AA | PRIORITY |
| | | US 845857 | A1 | 19920303 |
| US 5571692 | P | 19931216 | US AE | APPLICATION DATA (PATENT) |
| | | | (APPL. DATA (PATENT)) | |
| | | US 168686 | A | 19931216 |
| US 5571692 | P | 19961105 | US A | PATENT |
| US 5599904 | P | 19871202 | US AA | PRIORITY |
| | | US 128331 | B2 | 19871202 |
| US 5599904 | P | 19881130 | US AA | PRIORITY |
| | | US 276536 | A3 | 19881130 |
| US 5599904 | P | 19900806 | US AA | PRIORITY |
| | | US 546570 | B3 | 19900806 |
| US 5599904 | P | 19920303 | US AE | APPLICATION DATA (PATENT) |
| | | | (APPL. DATA (PATENT)) | |
| | | US 845857 | A | 19920303 |
| US 5599904 | P | 19970204 | US A | PATENT |

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
 Patent (No,Kind,Date): WO 8905355 A1 19890615
 RETINOIC ACID RECEPTOR COMPOSITION AND METHOD (English)
 Patent Assignee: SALK INST FOR BIOLOGICAL STUDI (US)
 Author (Inventor): EVANS RONALD MARK (US); GIGUERE VINCENT (CA); ONG
 ESTELITA SEBASTIAN (US); SEGUI PRUDIMAR SERRANO (US); UMESONO
 KAZUHIKO (US); THOMPSON CATHERINE CAROLINE (US)
 Priority (No,Kind,Date): US 128331 A 19871202; US 276536 A
 19881130
 Applic (No,Kind,Date): WO 88US4284 A 19881201
 Designated States: (National) AU; DK; JP; KR
 Filing Details: WO 13000 With international search report; Before
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 republished in the event of the receipt of the amendments
 IPC: * C12P-021/02; C12P-019/34; C12P-015/00; C07H-015/12; C12Q-001/68
 ; C12N-005/00; C12N-001/00; C07K-013/00
 CA Abstract No: ; 114(13)116377E
 Derwent WPI Acc No: ; C 89-192701
 Language of Document: English

WORLD INTELLECTUAL PROPERTY ORGANIZATION, PCT (WO)
 Legal Status (No,Type,Date,Code,Text):
 WO 8905355 P 19871202 WO AA PRIORITY (PATENT)
 US 128331 A 19871202
 WO 8905355 P 19881130 WO AA PRIORITY (PATENT)
 US 276536 A 19881130
 WO 8905355 P 19881201 WO AE APPLICATION DATA (APPL.
 DATA)
 WO 88US4284 A 19881201
 WO 8905355 P 19890615 WO AK DESIGNATED STATES CITED IN A
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 (DESIGNATED STATES CITED IN A PUBLISHED APPL.
 WITH SEARCH REPORT)
 AU DK JP KR
 WO 8905355 P 19890615 WO A1 PUBLICATION OF THE

INTERNATIONAL APPLICATION WITH THE
INTERNATIONAL SEARCH REPORT (PUB. OF THE
INTERNATIONAL APPL. WITH THE INTERNATIONAL
SEARCH REPORT)

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